## **AUTHORS' INDEX**

(The numerals indicate the page.)

Abels, J. C., and Rhoads, C. P. Hemolysin, anemia, 849.

Abels, J. C., and Rhoads, C. P. Hemolysin, anemia, 849.
Abramson, H. A., Engel, M., Lubkin, V., and Ochs, I. Histamine, allergic wheal, 65.
Abt, A. F. See Farmer, C. J., 399.
Adams, A. E., and Granger, B. Ovulation, pituitary, 552; reproductive tract, ant. pituitary, 585.
Adams, C. O. Phosphorus, bone growth, 449.
Aggeler, P. M., and Lucia, S. P. Prothrombin time, 11.
Alexander, W. F., Dillon, J. B., and Jordan, C. N. Thio esters, choline, 566.
Almquist, H. J., Pentler, C. F., and Mecchi, E. Antihemorrhagic vitamin, bacteria, 336.

336.

Anderson, A. K. See Wright, L. D., 370.

Anderson, E., and Evans, H. M. Antithyrotropic substance, pituitary extr., 797; and Haymaker, W. Adrenal cortical hormone, Cushing's Disease, 610.

Anderson, O. D. See Rose, J. A., 653.

Anderson, R. C. See Lee, H. M., 366.

Anderson-Stewart, B. See Meyer, K. F., 17.

Antopol, W., and Glick, D. Shwartzman phenomenon, 346; Schifrin, A., and Tuchman, L. Choline-esterase activity, bile, 363.

365.
Ashkenaz, E. W. Muscle fibers, chemical stimuli, 719.
Astrup, T. See Fischer, A., 494.
Astwood, E. B., and Greep, R. O. Corpus luteum-stimulating substance, placenta,

Badal, J. J. See Roberts, J. T., 322.
Baker, Z., Fazekas, J., and Himwich, H. E.
Renal metabolism, pancreatectomy, 499.
Baldes, E. J. See Essex, H. E., 325.
Ball, H. A., and Samuels, L. T. Adrenal wt.,
tumor, 441.
Barker, S. B., and Smyth, E. Pump, gas
samples, 745.
Barnes, R. H. See MacKay, E. M., 410, 417,

833.
Bartlett, R. M., Bingham, D. L. C., Pedersen, S., Maddock, W. G., and Coller, F. A. Body chlorides, 89.
Bartley, S. H. Brightness discrimination, 535.
Basset, J., Gratia, A., Macheboeuf, M., and Manil, P. High pressure, plant viruses,

248.

Batterman, R. C. See DeGraff, A. C., 373.

Baumann, C. A., and Rusch, H. P. Choline, atherosclerosis, 647.

Bechdel, S. I. See Guerrant, N. B., 827.

Becker, J. E., and McCollum, E. V. Toxicity, MnCl<sub>2</sub>. 4H<sub>2</sub>O, 740.

Beeson, P. B., and Hoagland, C. L. CaCl<sub>2</sub>, serum, 160.

Benenson, W., and Hitzig, W. M. Blood, ether circulation time, venous-arterial shunt, 256.

Berberian, I D. A. Leishmaniasis, transmis-

sion, 254.

Berger, A. R. See Nadler, J. E., 381.

Bergh, G. S., and Layne, J. A. Pain biliary trace, 44.

Milay G. P. Procaine con-

trace, 44.

Beutner, R., and Miley, G. P. Procaine con-

vulsions, 279.

Bierman, W. See Friedlander, M., 150.

Bingham, D. L. C. See Bartlett, R. M., 89.

Bird, H. R., and Oleson, J. J. Vitamin A, cod liver oil, 870.

Bishop, G. H., and O'Leary, J. Optic cortex, 532.

Blauch, M. B., and Koch, F. C. Uric acid,

blood, 638.

Blinks, L. R. Ammonia in potential reversal,

halicystis, 663.

Blum, J. E., Jr. See Decherd, G. M., Jr.,

341.

Blunden, H. L. beta hydroxybutyric acid, 466.
Boyd, M. J., and Tamura, J. T. Anaphylactic shock, ketenizing serum, 184; see Tamura, J. T., 909.

Boyd, W. L. See Shaw, J. C., 579.

Boylston, G. A., and Ivy, A. C. Antidiuretic substance, urine, 644.

Breedis, C. See Furth, J., 490.

Brice, A. T., Jr. See Schultz, E. W., 605.

Briggs, A. P. Ammonia, alkalosis, 883.

Brink, F. See Sjostrand, T., 918.

Bronken D. W. See Larrabee, M. G., 921; see Sjostrand, T., 918.

Brooks, S. C. Penetration, radioactive ions, 856.

850.

Brooksby, J. B. Oestrin, ant. pituitary, 832.
uterine reaction, testosterone, 235.
Brown, M. R. See Talbott, J. H., 421.
Bruger, M., and Friedman, B. Insulin, excretion, 840.
Brugsch, J. T., and Keys, A. Porphyrins,

Brugsch, J. I., and Keys, A. Torpurtus, 557.
Bryan, W. R. See Wolfe, J. M., 80.
Buchbinder, L., Solotorovsky, M., and Solowey, M. Hemolytic streptococci, air, 570.
Bumbalo, T. S. See Jetter, W. W., 164.
Burch, A. B. Pituitary, pars intermedia,

Burich, A. B. Pitutary, pars intermess, gastrula, 608.
Burch, G. E. See Sodeman, W. A., 882.
Burdon, K. L., and Burns, E. L. Antipneumococcic serum, 343.
Burns, E. L. See Burdon, K. L., 343.
Burnil, M. W. See Greene, R. R., 1, 4.
Burstein, C. L. Cyclopropane, intestine, 530.

Carmichael, E. B. See Fidler, H. K., 892.
Carne, H. O. See MacKay, E. M., 131.
Carr, G. J. See Hiatt, E. P., 356.
Carr, J. L. See Kreutzman, W., 19.
Chambers, L. A., and Weil, A. J. Immunology, pneumococci, 924.
Chang, H. L. Spirochaeta recurrentis, 23.
Charipper, H. A. See Gordon, A. S., 773.
Chen, K. K., Rose, C. L., and Robbins, E. B.
Toxicity, nicotinic acid, 241; see Lee, H.
M., 366.

M., 366.

Ch'in, T. L. Isolation, pathogenic fungi, 700.
photodynamic action of dyes, gonococcus,

Chinn, B. D. Sulfanilamide, Brucella, 732.
Chinn, H. See Kendall, A. I., 8.
Choisser, R. M., and Ramsey, E. M. Ascitic fluid, shock, 651.

Chow, B. F., and Wong, S. C. Iodin tivation of complement, 120; and Iodine, inactivation of complement, 120; and Zia, S.
H. Dialyzable component, complement,
695; iodine, complement, 690; see Chu,
F. T., 679; see Lee, K. H., 101; see Zia,
S. H., 688.
Chu, F. T., and Chow, B. F. Vitamin C,
blood plasma, 679; see Wu, J. P., 693.
Chu, H. J. Allantoin, growth, 99.
Chung, H. L. Spirochetes, relapsing fever,
97.

Clark, B. B., and Morrissey, R. W. Ethyl alcohol, acidosis, Na, 734.
Clifton, C. E., and Logan, W. A. Lactic acid, E. coli, 619.
Clowes, G. H. A., Krahl, M. E., and Davis, W. W. pH, thickness surface films, 526.
Coggeshall, L. T. Sulfonamide compounds, malaria, 768.
Cole, H. H. Gonadotropic hormone, pregnance, 193

malaria, 768.

Cole, H. H. Gonadotropic hormone, pregnancy, 193,
Coller, F. A. See Bartlett, R. M., 89.
Consolazio, W. V. See Talbott, J. H., 421.
Cook, E. S., Hart, M. J., and Joly, R. A. Endogenous respiration, yeast, 169.
Cook, M. M., and Stoesser, A. V. Pitressin, asthma, 636.
Coombs, F. S. See Talbott, J. H., 421.
Cooper, F. B., Gross, P., and Lewis, M. Chemotherapy, pneumococcal meningitis, 835; sulfonanilide, streptococcus, 375; see Gross, P., 275, 407; see Mellon, R. R., 158.
Corbin, K. B., and Harrison, F. Tongue innervation, 308.
Cotter, J., and MacNeal, W. J. Citrate, blood, preservation, 757.
Coulter, C. B., and Stone, F. M. Porphyrin, C. diphtheriae, 423.
Cowgill, G. R. See Melnick, J. L., 899.
Csonka, F. A. Amino acids, cystine, 281.
Curtis, Q. F. See Sutherland, G. F., 460.
Cutuly, E., Cutuly, E. C., and McCullagh, D. R. Spermatogenesis, androgens, 818.
Cutuly, E. C. See Cutuly, E., 818.
Cutuly, E. C. See Cutuly, E., 818.
Czarnetzky, E. J., and Henle, W. Mammalian spermatozoa, 63.

Danforth, D. N., and Ivy, A. C. Ca., uterine activity, 550.

Daniels, A. L. Vitamin B<sub>1</sub>, mílk, 212.

Darby, W. J. See Day, P. L., 860.

Davidoff, E. See Reifenstein, E. C., Jr., 181.

Davis, H. A., and White, C. S. Ascitic fluid,

Davis, H. A., and White, C. S. Ascitic fluid, shock, 462.
Davis, W. W. See Clowes, G. H. A., 526.
Day, P. L., Langston, W. C., and Darby, W. J. Nicotinic acid, cytopenia, 860.
DeArellano, M. R. See Dragstedt, C. A., 641; see Eyer, S. W., 642.
Decherd, G. M., Jr., and Blum, J. E., Jr. P. fractions, heart muscle, 341.
DeGraff, A. C., Batterman, R. C., and Lehman, R. A. Hg. diuretics, toxic action, 373.

man, R. A. Hg. diuretics, toxic action, 373.
Dennis, C. See Kabat, H., 864.
Dennis, J., and Mullin, F. J. Blood K, asphyxia, 560.
Denzer, B. S., Reiner, M., and Vogel, P. Ca., newborn, 492.
Derby, I. M. See Wiener, A. S., 487.
Dewey, B. T., and Poe, C. F. Ultraviolet, Pseudomonas fluorescens, 176.
Dickerson, V. C., and Whitney, L. F. Sulfanilamide, distemper, 263.
Dillon, J. B. See Alexander, W. F., 566.
Dillon, R. T. See Van Slyke, D. D., 548.
Dingle, J. H. See Shaffer, M. F., 528.
Dixon, H. M., and McCutcheon, M. Leukocytes, bacteria, 378.
Dobriner, K., Straim, W. H., and Localio, S. A. Porphyrin, pellagra, 748.
Dock, W. See Richardson, A. P., 866.
Doenges, J. L. Spirochetes, gastric glands, 536.

536.

Doisy, E. A. See Katzman, P. A., 122.

Dolger, H. See Pollack, H., 577.

Dorfman, A. See Koser, S. A., 311.

Doubly, J. A. See Bronfenbrenner, J., 210.

Dragstedt, C. A., Eyer, S. W., and DeArellano, M. R. Vitamin C, shock, 641; see

Eyer, S. W., 642.

Drury, D. R., and Palmer, J. J. Insulin, diabetes, 394.

Duran-Reynals, F. Toxins, poisonous secretions, snake, 763.

Eagle, E. Choline, estrous cycle, 303.
Ecker, E. E., and Pillemer, L. Inactivation, complement, iodo-acetic acid, 316; Pillemer, L., and Grabill, F. G. Serum lipoids, 318.
Eddie, B. See Meyer, K. F., 17, 333.
Emerson, G. A., and Evans, H. M. Nicotinic acid, "filtrate factor," 195; and Van Liere, E. J. Adrenin, anoxia, 500; see Evans, H. M., 197, 625; see Telford, I. R., 623.

Emerson, O. H. See Evans, H. M., 197. Emge, L. A., Murphy, K. M., and Schilling, W. Theelin, adenofibroma, 21; Schilling, W., and Wulff, L. M. R. Pregnancy, sar-

w., and wulfi, L. M. K. Fregnancy, sar-coma, 338. Engel, M. See Abramson, H. A., 65. Erhard, P. See Herrmann, G., 35. Essex, H. E., Herrick, J. F., Baldes, E. J., and Mann, F. C. Digitalis, blood flow,

325.

Evans, H. M., Emerson, G. A., and Emerson, O. H. Growth, tocopherol, 197; Emerson, G. A., and Telford, I. R. Vitamin E, musculature, 625; Moon, H. D., Simpson, M. E., and Lyons, W. R. Thymus, adrenocorticotropic hormone, 419; see Anderson, E., 797; see Emerson, G. A., 195; see Telford, I. R., 623.

Evans, R. D. See Hertz, S., 510.

Eyer, S. W., Dragstedt, C. A., and DeArellano, M. R., Vitamin C, Shock, 642; see Dragstedt, C. A., 641.

Farmer, C. J., and Abt, A. F. Plasma ascorbic acid, KCN, 399.

Fazekas, J. See Baker, Z., 499; see Himwich, H. E., 137.

Fekete, E. Sexual abnormalities, 59.

Ferguson, L. C. See Irwin, M. R., 451.

Fidler, H. K., Glasgow, R. D., and Carmichael, E. B. Venom, crotalus, 892.

Field, H., Jr. See Melnick, D., 723.

Fischer, A., and Astrup, T. Inhibition, anticoagulants, 494.

Fisk, R. T. Typhoid infection, phage, 659.

Fitzpatrick, F. See Zinsser, H., 285.

Foord, D. C., McOmie, W. A., and Salle, A. J. Germicidal efficiency, silver compounds, 572.

J. Germicidal efficiency, silver compounds, 572.

Forster, A. C. Morphine, motility, 332; see Maison, G. L., 425.

Forster, R. P. Xylose, inulin, creatinine clearance, 258.

Fox, C. L., Jr. See Ottenberg, R., 479.

Frank, R. T., Klempner, E., and Hollander, F. Male sex hormone, 853.

Fraps, R. M. Thyroxine, female hormone, feather development, 201.

Frazier, C. N. See Hu, C. K., 116.

Freed, S. C., and Soskin, S. Estrin, uterus, 391.

Friedmann, U. See Schultz, A. S., 404.
Friedemann, U. See Zuger, B., 283.
Friedlander, M., Silbert, S., Bierman, W., and Laskey, N. Temperature, skin, 150.
Friedman, B. See Bruger, M., 840; see Prinzmetal, B., 493.
Friedman, G. J., Rubin, S. H., and Kees, W. Blood, KCN, 358.
Frohlich, M. M. See Papageorge, E. T., 742.
Fuller, J. E. Bile, Aerobacter aerogenes, 507.
Furth, J., Tuggle, A., and Breedis, C. X-ray, neoplastic cells, 490; see Kahn, M. C., 485.

Gaines, J. A., Salmon, U. J., and Geist, S. H. Testosterone propionate, endometrial cycle, 779.

Gammon, G. D. K, paralysis, 922.
Gannon, C. F., and McGovern, T. Pyridium, Vitamin C, 267.
Gardner, W. U., and Pfeiffer, C. A. Estrogenic effect, testosterone, 599.
Gawron, O. See Sobel, A. E., 433.
Gebhardt, L. P. See Schultz, E. W., 603, 605.
Geist, S. H., Salmon, U. J., and Mintz, M. E. Progesterone, Fallopian tube, 783; see Gaines, J. A., 779.
Gellhorn, E., and Lambert, E. Anoxia, carotid sinus pressor reflex, 315; nerves, oxygen deficiency, 427; see Lambert, E., 427; see Ury, V., 426.
Gerard, R. W. See Libet, B., 886.
Gersh, I. Gastric mucous membrane, chloride, 70.
Getz, H. R. Cod liver oil, tuberculosis, 543.
Girden, E. Cerebral mechanisms, auditory, 766.

Girden, E. Cerebral mechanisms, auditory, 766.
Glasgow, R. D. See Fidler, H. K., 892.
Glenn, F., and Lasher, E. P. Thyroidectomy, hypertension, 158.
Glick, D. See Antopol, W., 346.
Gonzalez, L. M. See Otero, P. M., 703.
Goodwin, J. E., Lloyd, D. P. C., and Hall, G. E. Pentamethyleneterizacol, insulin, 897.
Gordon, A. S., and Charipper, H. A. Splenettomy, antihormone, 773; see Kleinberg, W. Erythrocyte, splenectomy, 360.
Grabill, F. G. See Ecker, E. E., 318.
Granger, B. See Adams, A. E., 552, 585.
Gratia, A. See Basset, J., 248.
Green, B. S. See King, J. T., 810, 812.
Green, R. G., Mather, D. W., and Larson, C. L. Shock disease, 816.
Greene, M. R., and Morgan, H. R. Progesterone, tuberculosis, 656.
Greene, R. R., Burrill, M. W., and Ivy, A. C. Hormone, androgen, sexual development, 1; hormone, male sex, 4.
Greep, R. O. See Astwood, E. B., 713; see Hellbaum, A. A., 902.
Griffith, J. Q., Jr. See Lindauer, M. A., 497.
Grobstein, C. Hypophysis, thyroidectomy, 801.

Grobstein, C. Hypophysis, thyroidectomy, 801.

Gross, E. S., Sasaki, Y., and Spies, T. D. Nicotinic acid, porphyrinuria, 289; see Spies, T. D., 178.

Gross, P., Cooper, F. B., and Lewis, M. B. perlussis infection, 407; streptococcal hemolysin, sulfonamide, 275; see Cooper, F. B., 375, 835.

Guerrant, N. B., Morck, R. A., Bechdel, S. I., and Hilston, N. W. Vitamin D, storage, 827.

Gullberg, J. E., Olmsted, J. M. D., and Wagman, I. H. Light adaptation, 616; see Wagman, I. H., 613.

Gurley, M. K. See Hoyt, A., 40.

Gutman, A. B., and Gutman, E. B. Phosphatase, serum, 470.

Gutman E. B. See Gutman, A. B., 470.

György, P. Pediculosis, diet, 383.

Hall, G. E. See Goodwin, J. E., 897; see
Leibel, B. S., 894.
Hall, W. K. Liver, acacia, 46.
Hallock, P. Blood lactic acid, polycythemia,

Hamilton, J. B. See Miller, N. E., 538. Harford, C. G. See Olitsky, P. K., 92. Harris, J. S., and Klein, J. R. Sulfanilamide,

Harris, J. S., and Klein, J. R. Sulfanile liver tissue, 78.

Harrison, F. See Corbin, K. B., 308.

Hart, M. J. See Cook, E. S., 169.

Harvey, S. C. See Taffel, M., 518.

Haury, V. G. Mg., lung, 233.

Haymaker, W. See Anderson, E., 610.

Hays, H. W. See Swingle, W. W., 876.

Hegarty, C. P. See Rahn, O., 218.

Heinbecker, P. See White, H. L., 439.

Hellbaum, A. A., and Greep, R. O. Gonad

Hellbaum, A. A., and Greep, R. O. Gonad stimulation, pituitary, 902.
Heller, R. E. See Soskin, S., 6.
Henle, W. See Czarnetzky, E. J., 63.
Henschel, A. F. See King, J. T., 810, 812.
Herrick, J. F. See Essex, H. E., 325.
Herrmann, G., and Erhard, P. Myocardium, creatinine, 35.
Hershey, A. D. Growth, B. coli, 127; see Bronfenbrenner, J., 210.
Hertz, S., Roberts, A., and Evans, R. D. Radioactive iodine, thyroid, 510.
Hertzman, A. B. Blood supply estimation, skin, 562; skin vascular reaction, cold pressor test, 628.
Hetherington, A. See Schultz, E. W., 799.
Heymans, C. Anastomosis, 415.
Hiatt, E. P., Carr, G. J., and Krantz, J. C., Jr. Sugar alcohols, 356.
Hiller, A. See Van Slyke, D. D., 548.
Hilstom, N. W. See Guerrant, N. B., 827.
Himwich, H. E., and Fazekas, J. F. Respiratory quotient, diabetic liver, 137; see Baker, Z., 499.
Hines, H. M. See Knowlton, G. C., 665.
Hitzig, W. M. See Benenson, W., 250.
Hoagland, C. L. See Beeson, P. B., 160.
Hollander, F. See Frank, R. T., 853; see Jemerin, E. E., 139.
Hooker, S. B. Sedimentation, antihemocyanin systems, 911.
Howitt, B. F. Encephalitis virus, 334.
Hoyt, A., and Gurley, M. K. Virus, rabies, immunization, 40.
Hrubetz, M. C. Insulin convulsions, 300.
Hu, C. H. See Zia, S. H., 26.
Hu, C. K., and Frazier, C. N. Female sex hormone, dewlap, 116.
Hubert, G. See Miller, N. E., 538.
Huntington, R. W., Jr. Sulfanilamide, hemolytic streptococci, 328.

Ingle, D. J. Thymus, cortin, 443.
Irwin, M. R., and Ferguson, L. C. Bactericidins, Brucella abortus, 451.
Ivy. A. C. See Boylston, G. A., 644; see Danforth, D. N., 550; see Greene, R. R., 1, 4; see Wigodsky, H. S., 785, 787.

Jacobs, H. R. Cysteine, insulin, 305. Jacobs, J. L., and Welcker, M. L. Allergy, Rhus toxicodendron, 726.

Jeffers, W. A. See Lindauer, M. A., 497. Jemerin, E. E., and Hollander, F. Vagal innervation, stomach, 139.

Jetter, W. W., and Bumbalo, T. S. Vitamin C, cerebrospinal fluid, 164.

Johlin, J. M. Toxins, interfacial adsorption,

Johnson, J. W., Jr. See Pappenheimer, A. M., 777.
Johnson, L. V. Eyes, pannus-forming infection, 42.
Joly, R. A. See Cook, E. S., 169.
Jones, O. P. Reticulocytosis, anemia, 222.
Jordan, C. N. See Alexander, W. F., 566.
Jungeblut, C. W. See Warren, J., 752.

Kabat, H., and Dennis, C. Decerebration, anemia, brain, 864.
Kahn, M. C., and Furth, J. Transmission of sarcoma, 485.
Katzin, B. See Long, C. N. H., 516.
Katzman, P. A., Wade, N. J., and Doisy, E. A. Pituitary extr., 122.
Kees, W. See Friedman, G. J., 358.
Keller, A. D. Diabetes, "latent period," 31.
Kendall, A. I., and Chinn, H. Ascorbic fermenting bacteria, 8.
Keresztesy, J. C., and Stevens, J. R. Crystalline Vitamin B6, 64.

Keys, A. See Brugsch, J. T., 557.
Kidd, J. G. Antigen, carcinoma, 292.
King, J. T., Green, B. S., and Henschel, A. F. Leukocytes, streptococci, 812; Henschel, A. F., and Green, B. S. Prontosilsoluble, streptococci, 810.
Kirschbaum, A. See Lits, F. J., 555.
Kleiber, M. Metabolism, body size, age, 793.
Klein, J. R. See Harris, J. S., 78.
Klein, J. R. See Gordon, A. S., 360.
Klempner, E. See Gordon, A. S., 360.
Klempner, E. See Frank, R. T., 853.
Knott, J. R. Rhythm, light stimuli, 216.
Knowlton, G. C., and Hines, H. M. Vitamin E, muscle, 665.
Koch, F. C. See Blauch, M. B., 638.
Komarov, S. A., Dorfman, A., and Saunders, F. Nicotinic acid, growth, 311.
Krahl, M. E. See Clowes, G. H. A., 526.
Kramer, B. See Sobel, A. E., 433, 435.
Krantz, J. C., Jr. See Hiatt, E. P., 356.
Kreutzman, W., and Carr, J. L. Prontosil, blood cells, 19.
Kurotchkin, T. J., and Wong, S. C. Polysaccharides, encapsulated bacillus, 113.

Lack, A. R. Fungus, Coccidioides, 907.
Lambert, E. See Gellhorn, E., 315.
Lancefield, R. C. Hemolytic streptococci, antisera, 473.
Landis, C. See Strauss, H., 369.
Lands, A. M. Acetylcholine, heart, 48.
Landy, M. Nicotinic acid, S. aureus, 504.
Langston, W. C. See Day, F. L., 860.
Larrabee, M. G., and Bronk, D. W. Sympathetic ganglion cells, stimulation, 921.
Larson, C. L. See Green, R. G., 816.
Lasher, E. P. See Glenn, F., 138.
Laskey, N. See Friedlander, M., 150.
Lawrence, J. S., and Syverton, J. T. Spontaneous agranulocytosis, 914.
Layne, J. A. See Bergh, G. S., 44.
Leathem, J. H. Blood pressure, urine extr., 546.

LeBlond, C. P. Maternal behavior, hormone,

LeBlond, C. P. Maternal behavior, hormone, 66.
Lee, C. U. See Wang, C. W., 670, 674.
Lee, H. M., Anderson, R. C., and Chen, K. K. Sulfanilamide, 366.
Lee, K. H., Chow, B. F., and Wu, H. Immunologically pure precipitin, 101.
Lehman, R. A. See DeGraff, A. C., 373.
Leibel, B. S., and Hall, G. E. Cerebral blood flow, insulin shock, 894.
Lerman, J., and Salter, W. T. Myxedema, cretinism, blood serum, 94.
Leven, N. L. Cholangiography, 808.
Levine, R. See Soskin, S., 6.
Levin, A. Serum, alcohol, 859.
Lewis, H. B. See Papageorge, E. T., 742.
Lewis, M. See Cooper, F. B., 375, 835; see Gross, P., 275, 407.
Libet, B., and Gerard, R. W. Nicotine block, synapses, 886.

Libet, B., and Gerard, R. W. Nicotine block, synapses, 886.

Light, R. F. See Schultz, A. S., 404.

Lilly, C. A. Caries, casein, 398.

Lindauer, M. A., Griffiths, J. Q., Jr., and Jeffers, W. A. Ergotamine tartrate, hypertension, 497.

Lits. F. J. Kirschbaum, A. and Strong, J.

tension, 497.

Lits, F. J., Kirschbaum, A., and Strong, L. C. Colchicine, neoplasm, 555.

Liu, P. Y., Zia, S. H., and Wang, K. C. Typhus fever, vaccination, 682; see Zia, S. H., 685.

Lydyd, D. P. C. See Goodwin, J. E., 897.

Localio, S. A. See Dibriner, K., 748.

Logan, W. A. See Clifton, C. E., 619.

Long, C. N. H., and Katzin, B. Adrenal cortical hormone, carbohydrates, 516.

Loring, H. S., Osborn, H. T., and Wyckoff, R. W. G. Ultracentrifugal isolation of proteins, 239.

Lubkin, V. See Abramson, H. A., 65. Lucia, S. P. See Aggeler, P. M., 11. Lyons, W. R. See Evans, H. M., 419; see Pencharz, R. 1., 388.

McCollum, E. V. See Becker, J. E., 740.
McCoy, O. R. Sulfanilamide, trichiniasis, 461.
McCutlagh, D. R. See Cutuly, E., 818.
McGutcheon, M. See Dixon, H. M., 378.
McGovern, T. See Gannon, C. F., 267.
McGuigan, R. A. Digitalis action, antipyretics, 314.
McMaster, P. D. See Port.

retics, 314.

McMaster, P. D. See Parsons, R. J., 408.

McOmie, W. A. See Foord, D. C., 572.

Ma, Y. C. See Tung, T., 103.

Macheboeuf, M. See Basset, J., 248.

MacFadyen, C. See Van Slyke, D. D., 548.

MacKay, E. M., and Barnes, R. H. Choline, letosis, ant. pituitary extr., 803; pancreas extr., ketosis, 410; succinic acid, glucose, 417; and Carne, H. O., 131.

MacLenathen, E. See Wright, I. S., 55.

Maddock, W. G. See Bartlett, R. M., 89.

Maison, R. R. Bacteriophage, streptofibrinolysin, 129.

Maison, G. L., and Forster, A. C. pH change, pain, 425.

Maison, G. L., and Forster, A. C. pH change, pain, 425.

Major, R. H. Insulin, intestine, 721.

Manil, P. See Basset, J., 248.

Mann, F. C. See Essex, H. E., 325.

Marcus, E. See Rogoff, J. M., 199.

Marcus, P. M., and Necheles, H. Sulfanilamide, distemper, 385.

Margolis, G. See Smith, S. G., 251.

Margolis, L. H. See Smith, S. G., 251.

Marine, D. Androgens, exophthalmos, 353.

Marrazzi, A. Drug action, cholinergic mechanism, 349.

anism, 349.

Marshak, A. Chromosome activity, x-ray, 705; gonadotropic hormone, dwarfism, 226

226.

Martin, L. Insulin, iontophoresis, 564.

Marx, W., and Peck, S. M. Venom, toxic components, 84.

Mather, D. W. See Green, R. G., 816.

Mayerson, H. S., and Toth, L. A. Posture, skin, temperature, 879.

Mecchi, E. See Almquist, H. J., 336.

Mellon, R. R., and Cooper, F. B. Hemolytic streptococci, 158.

Melnick, D., and Field, H., Jr. Phenol, vitamin B1, 723.

Melnick, J. L., and Cowgill, G. R. Lead, hair, 899.

Merckel, C. E. See Nelson, W. O., 737.

Meyer, A. E., and Wertz, A. Metabolism, thyroxine, 847; thyroid hormone, estrin, 843.

843. 843.

Meyer, K. F., and Eddie, B. Sylvatic plague,
333; Eddie, B., and Anderson-Stewart, B.
Leptospirosis, 17.
Miley, G. P. See Beutner, R., 279.
Miller, A. T., Jr. See Whitehead, W. K.,
591.
Miller, D. S. Refractoriness to thyrotropin,
453.
Miller, N. F., Hubert, G. and Hamilton, I.

453.

Miller, N. E., Hubert, G., and Hamilton, J. B. Male hormone, castration, 538.

Mintz, M. E. See Geist, S. H., 783.

Moore, A. R. Cleavage substance, Dendraster excentricus, 162.

Moran, H. Streptococci, endocarditis, 805.

Morck, R. A. See Guerrant, N. B., 827.

Morgan, H. R. See Greene, M. R., 656.

Morrell, J. A. See Swingle, W. W., 876.

Morrissey, R. W. See Clark, B. B., 734.

Mullin, F. J. See Dennis, J., 560.

Murphy, K. M. See Emge, L. A., 21.

Murray, J. W. See Osterhout, W. J. V., 468.

Nadler, J. E., and Berger, A. R. Pentame-thylenetetrazol, circulation, 381.
Necheles, H. See Marcus, P. M., 385.
Nelson, W. O., and Merckel, C. E. Sperma-togenesis, androgenic substance, 737.
Neter, E. Sulfanilande, meningococcus, 37; see Witebsky, E., 187.
Nicholson, H. C., and Sobin, S. Polarizing currents, medulla, 904.

Ochs, I. See Abramson, H. A., 65.
Oldberg, E. See Ury, B., 134.
O'Leary, J. See Bishop, G. H., 532.
Oleson, J. J. See Bird, H. R., 870.
Olitsky, P. K., and Harford, C. G. Intranuclear inclusions, non-virus materials, 92; see Sabin, A. B., 595, 597.
Olmsted, J. M. D. See Gullberg, J. E., 616.
Oppenheimer, E. T. See Prinzmetal, M., 493.
Osborn, H. T. See Loring, H. S., 239.
Osterhout, W. J. V., and Murray, J. W. Movement of water, gradient, 468.
Otero, P. M., and Gonzalez, L. M. Protein antigen, Brucella, 703.
Ottenberg, R., and Fox, C. L., Jr. Cyanosis, sulfanilamide, 479.
Ottenstein, H. N. See Quick, A. J., 77.

Palmer, J. J. See Drury, D. R., 394.
Papanicolaou, G. N. See Shorr, E., 759.
Papageorge, E. T., Frohlich, M. M., and
Lewis, H. B. Phenylalanine, homogentisic acid exerction, 742.
Pappenheimer, A. M., and Johnson, J. W.,
Jr. Parathyroid extr., nephrectomy, 777.
Parkins, W. M. See Swingle, W. W., 876.
Parsons, R. J., and McMaster, P. D. Pulse,
interstitial movement, 408.
D. Testes, hypophyses, gassed male rats,
455.

455.
Peaul, J. R. See Trask, J. D., 147.
Pearce, J. M. Virus III infection, 872.
Peck, S. M. See Marx, W., 84.
Pedersen, S. See Bartlett, R. M., 89.
Pencharz, R. I., and Lyons, W. R. Lactation, hypophysectomy, 388.
Pentler, C. F. See Almquist, H. J., 336.
Perry, J. C. Gonad activity, diet, 716.
Petersen, W. E. See Shaw, J. C., 579, 631,

Petrovsky, D. D. See Sobel, A. E., 435.
Pfeiffer, C. A. See Gardner, W. U., 599.
Pickett, A. D. See Patterson, C. A., 455.
Pickrell, K. L. Alcoholic intoxication, pneumonia, 265.
Pillemer, L. See Ecker, E. E., 316, 318.
Poe, C. F. See Dewey, B. T., 176.
Pollack, H., and Dolger, H. Protamine zinc insulin, hyperglycemia, 577.
Ponder, E. Hemolytic properties, indol, 237; and Rhoads, C. P. Lysins, anemia, 540.
Prinzmetal, M., Friedman, B., and Oppenheimer, E. T. Vasomotor properties of blood, hypertension, 493.

Quick, A. J., Ottenstein, H. N., and Welt-chek, H. Hippuric acid, sodium benzoate, 77.

Rahn, O., and Hegarty, C. P. Lactic fermentation, 218.
Ramsey, E. M. See Choisser, R. M., 651.
Rane, L., and Subbarow, Y. Hemolytic streptococci, 837.
Red, C. I. Vitamin D, toxic action, 791.
Reifenstein, E. C., Jr., and Davidoff, E. Benzedyine sulfate, amytal, 181.
Reiner, M. See Denzer, B. S., 492.

Rhoads, C. P. See Abels, J. C., 849; see Ponder, E., 540. Richardson, A. P., and Dock, W. Reti-culocytes, liver extr., O., 866. Richardson, R. Complement fixation, in-sulin, 874. Rigdon, R. H. Staphylococcal enterotoxin,

82.
Robbins, E. B. See Chen, K. K., 241.
Roberts, A. See Hertz, S., 510.
Roberts, J. T., Wearn, J. T., and Badal, J.
J. Heart, capillary-muscle ratio, 322.
Robinson, E. C. See White, H. L., 439.
Robson, J. M. Estrous changes, triphenyl ethylene, 153.
Rogers, F. T. Blood density, typhoid vaccine, 35.

Rogers, F. T. Blood density, typhoid vaccine, 73.
Rogoff, J. M., Marcus, E., and Wasserman, P. Epinephrine, hypertension, 199.
Rose, C. L. See Chen, K. K., 241.
Rose, J. A., Tainton-Pottberg, A., and Anderson, O. D. Insulin shock, reflex, 653.
Rosen, S. H. pH, thyroxine, 171.
Ross, A. F., and Stanley, W. M. Tobacco mosaic virus protein, 260.
Rubin, S. H. See Friedman, G. J., 358.
Rusch, H. P. See Baumann, C. A., 647.
Rytand, D. A. Arterial hypertension, 10.

Sabin, A. B. Virus, nerves, 270; and Olitsky, P. K. Encephalomyelitic virus, CNS, 595,

Salle, A. J. See Foord, D. C., 572; see Schechmeister, I. L., 295.

Salle, A. J. See Foord, D. C., 572; see Schechmeister, I. L., 295.

Salmon, U. J. Androgens, ovary, 352; skin absorption, dihydroxyestrin, 481; see Gaines, J. A., 779; see Geist, S. H., 783.

Salter, W. T. See Lerman, J., 94.

Samuels, L. T. See Ball, H. A., 441.

Sasald, Y. See Gross, E. S., 289; see Spies, T. D., 178.

Saunders, F. See Koser, S. A., 311.

Schechmeister, I. L., and Salle, A. J. Germicidal efficiency, phenolic compounds, 295.

Schechtman, A. M. Nerve, neural plate formation, 430.

Schifrin, A. See Antopol, W., 363.

mation, 430.

Schilfrin, A. See Antopol, W., 363.

Schilling, W. See Emge, L. A., 21, 338.

Schultz, A. S., Light, R. F., and Frey, C. N. Vitamin B1 metabolism, 404.

Schultz, E. W., and Gebhardt, L. P. Zinc sulphate, poliomyelitis, 603; Terry, M. C., Brice, A. T., Jr., and Gebhardt, L. P. Meningo-encephalitis, 605; Williams, G. F., and Hetherington, A. Encephalitis virus, 799.

Seager, L. D. KCl, iris, 629.

Selye, H. Blood sugar, adrenalectomy, 728.

Shaffer, M. F., and Dingle, J. H. Antigens, antibodies, 528.

Shaanon, J. A. Renal excretion, creatinine, 245.

Sharpless, G. R. Goiter-producing diet, 166. Shaw, J. C., Boyd, W. L., and Petersen, W. E. Blood glucose, lactic acid, milk, 579; and Petersen, W. E. Amino acids, milk secretion, 632; Arginase, mammary gland, 631.

631.
Shope, R. E. Virus, myxomatosis, 86.
Shorr, E., Papanicolaou, G. N., and Stimmel, B. F. Ovarian follicular, male hormone, 759.
Silbert, S. See Friedlander, M., 150.
Silverman, M., and Werkman, C. H. Vitamin B<sub>1</sub>, metabolism, 823.
Simpson, M. E. See Evans, H. M., 419.
Sjostrand, T., Brink, F., and Bronk, D. W. Nerve activity, demarcation potential, 918. 918.

Smith, E. See Patterson, C. A., 455.

Smith, S. G., Margolis, G., and Margolis, L. H. Vitamin potency, nicotinic acid, 251. Smithburn, K. C. Age resistance, tuberculosis, 575; Prontylin, tuberculosis, 574. Smyth, E. See Barker, S. S., 745. Sobel, A. E., Gawron, O., and Kramer, B. Vitamin D, lead poisoning, 433; Wexler, I. B., Petrovsky, D. D., and Kramer, B. Ca, K, Vitamin D, lead poisoning, 435. Sobin, S. See Nicholson, H. C., 904. Sodeman, W. A., and Burch, G. E. Skin distensibility, 822. Solotorovsky, M. See Buchbinder, L., 570. Solowey, M. See Buchbinder, L., 570. Solowey, M. Hyperglycemia, diabetes, 51. Soskin, S., Levine, R., and Heller, R. E. Carbohydrates, hypophysectomy, 6; see Freed, S. C., 391. Spies, T. D., Gross, E. S., and Sasaki, Y. Nicotinic acid, porphyrinuria, 178; see Gross, E. S., 289. Spinka, I., and Weichselbaum, P. M. Antistanley, W. M. See Ross, A. F., 260. Spinka, I., and Weichselbaum, P. M. Anti-sera, organ proteins, 447.

Stanley, W. M. See Ross, A. F., 260.

Steiner, A. Choline, atherosclerosis, 231.

Stevens, J. R. See Keresztesy, J. C., 64.

Stimmel, B. F. See Shorr, E., 759.

Stoesser, A. V. See Cook, M. M., 636.

Stone, F. M. See Coulter, C. B., 423.

Strain, W. H. See Dobriner, K., 748.

Strauss, H., and Landis, C. Epilepsy, metrazol, 369.

Strong, L. C. See Lite, F. J. razol, 369.
Strong, L. C. See Lits, F. J., 555.
Subbarow, Y. See Rane, L., 837.
Sutherland, G. F., and Curtis, Q. F. Myotonia, congenita, 460.
Swingle, W. W., Parkins, W. M., Taylor, A. R., Hays, H. W., and Morrell, J. A. Ant. pituitary, life-span, 876.
Syverton, J. T. See Lawrence, J. S., 914.

Taffel, M., and Harvey, S. C. Vitamin C, wounds, 518.
Tainton-Pottberg, A. See Rose, J. A., 653.
Talbott, J. H., Brown, M. R., and Coombs, F. S., and Consolazio, W. V. Blood, Meniere's Disease, 421.
Tamura, J. T., and Boyd, M. J. Ketene, antipneumococcus serum, 909; see Boyd, M. J., 184.
Tauber, H. Carboxylase, activators, 889; Cocarboxylase, 888; Pentoses, color test, 171. 171.

Taylor, A. R. See Swingle, W. W., 876.

Taylor, F. H. L. See Wilkins, R. W., 296.

Telford, I. R., Emerson, G. A., and Evans,
H. M. Thyroid, Vitamin E, 623; see
Evans, H. M., 625.

Terry, M. C. See Schultz, E. W., 605.

Toth, L. A. Renal response, epinephrine, 299;
see Mayerson, H. S., 879.

Trask, J. D., Vignec, A. J., and Paul, J. R.
Poliomyelitis virus, 147.

Tuchman, L. See Antopol, W., 363.

Tuggle, A. See Furth, J., 490.

T'ung, T. Photodynamic action, methylene
blue, 29; and Ma, Y. C. Hyperlipemia,
trypanosomiasis, 103; see Wong, S. C.,
668; see Zia, S. H., 688.

Ury, B., and Gellhorn, E. Oxygen deficiency, reflex dilatation, 426; and Oldberg, E. Sensory cortex, pain, 134.

Van Liere, E. J. See Emerson, G. A., 500. Van Slyke, D. D., Hiller, A., Dillon, R. T., and MacFadyen, C. Gelatin base, 548. Vignec, A. J. See Trask, J. D., 147. Visscher, M. B. Fat metabolism, heart, 323. Vogel, P. See Denzer, B. S., 492.

Vogel, P. See Denzer, B. S., 492.

Wade, N. J. See Katzman, P. A., 122.

Wagman, I. H., and Gullberg, J. E. Vitamin A, pupil dilation, 613; see Gullberg, J. E., 616.

Wang, C. W., and Lee, C. U. Kala-azar, neostibosan, 670, 674.

Wang, K. C. See Liu, P. Y., 682.

Ward, W. E. Oxidation-reduction potentials, bacteria, 445.

Warren, J., and Jungeblut, C. W. Meningo-coccal agglutinins, human serum, 752.

Wasserman, P. See Rooff, J. M., 199.

Wearn, J. T. See Roberts, J. T., 322.

Wei, H. See Zinsser, H., 285.

Weichselbaum, P. K. See Spinka, I., 447.

Weil, A. J. See Chambers, L. A., 924.

Weil, P. G. Pregnandiol, urine, 503.

Weiss, S. See Wilkins, R. W., 296.

Welcker, M. L. See Jacobs, J. L., 726.

Weltchek, H. See Quick, A. J., 77.

Werkman, C. H. See Silverman, M., 823.

Wertz, A. See Meyer, A. E., 843, 847.

Wexler, I. B. See Sobel, A. E., 435.

Wheeler, C. M. Trypanosoma cruzi infection, 191.

191.
White, C. S. See Davis, H. A., 462.
White, H. L., Heinbecker, P., and Robinson, E. C. Thyroid, diabetes, urine, 439.
Whitehead, W. K., and Miller, A. T., Jr.
Anoxia, respiratory function, 591.
Whitney, L. F. See Dickerson, V. C., 263.
Wiener, A. S., and Derby, I. M. Neurosyphilis, reagin, 487.
Wiersma, C. A. G. Giant fibers, central
nervous system, 661.
Wigodsky, H. S., and Ivy, A. C. Liver extract, erythrocytes, 787; Vitamin K, D,
785.

tract, erythrocytes, 787; Vitamin K, D, 785.

Wilkins, R. W., Weiss, S., and Taylor, F. H. L. Pyruvic acid, blood, 296.

Williams, G. F. See Schultz, E. W., 799.

Witebsky, E., and Neter, E. Skin lesions, pneumococci, 187.

Wolfe, J. M., Bryan, W. R., and Wright, A. W. Ant. pituitary, 80.

Wong, S. C. Polysaccharides encapsulated bacillus, 107, 110; and Tung, T. Antigenic, sensitizing properties, polysaccharides, 668; see Chow, B. F., 120; see Kurotchkin, T. J., 113.

Wright, A. W. See Wolfe, J. M., 80.

Wright, I. S., and MacLenathen, E. Ascorbic acid, kidney retention, 55.

Wright, L. D., and Anderson, A. K. Dibenzanthracene, 370.

Wu, H. See Lee, K. H., 101.

Wu, J. P., and Chu, F. T. Pertussis vaccine, immunization, 693.

Wulff, L. M. R. See Emge, L. A., 338.

Wyckoff, R. W. G. See Loring, H. S., 239.

Zia, S. H., Chow, B. F., and T'ung, T. Antibody, photosensitization, 688; and Hu, C. H. Typhus, rickettsiae, 26; and Liu, P. Y. Typhus infection, rickettsia, antibody, 685; see Chow, B. F., 690, 695; see Liu, P. Y., 682.
Zinsser, H., Wei, H., and Fitzpatrick, F. Typhus rickettsiae, 285.
Zuger, B., and Friedemann, U. Tetanus, 283:

## SUBJECT INDEX

(The numerals indicate the page.)

Acacia, liver, 46.
Acetylcholine, heart, 48.
Acidosis, sodium, 734.
Adrenal cortical hormone, carbohydrate, 516.
cortical hormone, Cushing's disease, 610.
tumor, 441.
Adrenalectomy, choline, liver, 131.
Adrenin, anoxia, 500.
Aerobacter aerogenes, bile, 507.
Agranulocytosis, spontaneous, 914.
Alcohols, sugar, 356.
Alkalosis, ammonia mechanism, 883.
Allantoin, growth, 99.
Allergy, Rhus toxicodendron, 726.
shock, serum, 184.
Shwartzman phenomenon, 346.
wheal, histamine, 65.
Amino acids, cystine, 281.
Amytal, benzedrine sulfate, 181.
Anemia, lysins, 540, 849.
reticulocytosis, 222.
Anoxia, nerve, 315.
respiratory function, 591.
Antibodies, photosensitization, 688.
Antigens, antibodies, 528.
Brucella, 703.
sensitizing property, polysaccharides, 668.
Arginase, mammary gland, 631.
Ascitic fluid, shock, 462, 651.
Ascorbic acid, kidney retenion, 55.
fermenting bacteria, 8.
KCN, 399.
Atherosclerosis, choline, 647. KCN, 399. Atherosclerosis, choline, 647. Bacteria, antihemorrhagic vitamin, 336.
ascorbic fermenting, 8.
inactivation, iodine, 120.
leukocytes, 378.
oxidation potentials, 445.
separation, 228.
Bactericidins, Brucella abortus, 451.
Bacteriology, iodo-acetic acid, 316.
Bacteriophage, strepto-fibrinolysin, 129.
B. coll. growth, 127.
Benzedrine sulfate, amytal, 181.
Bile, Aerobacter aerogenes, 507.
choline-esterase, 363.
Billary tract, pain, 44.
Blood cells, prontosil, 19.
cold pressor test, skin, 628.
density, typhoid vaccine, 73.
ether circulation time, 256.
flow, digitalis, 325.
interstitial movement, 408.
K. asphyxia, 560.
KCN, 358.
Meniere's disease, 421.
pentamethylenetetrazol, 381.
preservation, citrate, 757.
pressure, urine extracts, hypertension, 546.
pyruvic acid, 296. 546.
pyruvic acid, 296.
serum, CaCl., 160.
serum, myxedema, cretinism, 94.
sugar, adrenalectomy, 728.
supply, skin, 562.
vessel anastomoses, 415.
Bone growth, phosphorus, 449.
Brain, anemia, decerebration, 864.
mechanism, auditory, 766.
sensory cortex, pain reaction, 134.
Brucella abortus, bactericidins, 451.

Calcium chloride, serum, 160. Calcium chloride, serum, 160.
newborn, 492.
K, Vitamin D, lead poisoning, 435.
uterine activity, 550.
Carboxylase, activators, 889.
Carcinoma, antigen, 292.
Caries, casein, 398.
Chemistry, myocardium, 35.
Chlorides, body, 89.
Cholangiography, 808.
Choline, adrenalectomy, liver, 131.
atherosclerosis, 231.
estrease, bile, 363.
estrus, 303.
thio-esters, 566.
Chromosome sensitivity, x-rays, 705. Chromosome sensitivity, x-rays, 705. Cleavage substance, Dendraster excentricus, 162. Coagulant, anti-, inhibitory action, 494. Cocarboxylase, 888. Colchicine, neoplasm, 555. Complement, dialyzable component, 695. insulin, 874. iodine, 690. Convulsion, insulin, 300. procaine, 279. Corpus luteum, placenta, 713.
Cortin, thymus, 443.
Cretinism, myxedema, blood serum, 94.
Cyclopropane, intestine, 530.
Cysteine, insulin, 305. Diabetes, "latent period," 31.

respiratory quotient, 137.
urine, thyroid, 439.
Diet, goiter-producing, 166.
pediculosis, 383. Digitalis, antipyretics, 314. blood flow, 325. Diuretics, mercurial, toxic action, 373. Drug, cholinergic mechanism, 349.

Encephalitis, meningo-, 605.
virus, 334, 799.
virus, CNS, 595, 597.
Epilepsy, metrazol, 369.
Epinephrine, hypertension, 199.
Ergotamine tartrate, hypertension, 497.
Erythrocytes, liver extract, 787.
splenectomy, 360.
Eye, KCl, 629.

Films, surface, pH, 526. Fungus, coccidioides, 907. pathogenic, 700.

Gas samples, pump, 745.
Gastric mucous membrane, chloride, 70. Gastric mucous membrane, chloride, 2 Gastrin, 514.
Gelatin, base, 548.
Germicides, 210.
phenolic compounds, 295.
silver compounds, 572.
Glucose, blood, lactic acid, milk, 579.
Gotter-producing diet, 166.
Growth, allantoin, 99.
B. colk, 127.
nicotinic acid, 311.
tocopherol, 197.

Heart, acetylcholine, 48.
capillary-muscle ratio, 322.
metabolism, 323.
muscle, phosphorus, 341.
Hemocyanin, anti-, sedimentation, 911.
Hemolysin, anemia, 849.
Hemolytic properties, indol, 237.
streptococci, classification, 473.
Hippuric acid, sodium benzoate, 77.
Histamine, allergic wheal, 65.
Hormone, anti-, splenectomy, 773.
Androgens, exophthalmos, 353.
ovary, 352.
sexual development, 1.
spermatogenesis, 737, 818.
Estrin, dihydroxy-, skin absorption, 481.
uterus, 391.
Estrous changes, triphenyl ethylene, 153.
Estrus, choline, 303.
testosterone, 599.
Gonad activity, diet, 716.
dwarfism, 226.
pregnancy, 193.
Hypophysectomy, carbohydrate utilization, 6. excretion, 840.
hyperglycemia, 577.
intestine, 721.
iontophoresis, 564.
shock, cerebral blood, 894.
Interstitial movement, pulse, 408.
Intestine, cyclopropane, 530.
morphine, 332.
Iodine, inactivation of complement, 120. Kala-azar, neostibosan, 670, 674. Ketosis, pancreas extract, 410. Kidney, xylose, inulin, creatinine, 258. Lactation, hypophysectomy, 388.
Lactic acid, E. coli, 619.
fermentation, 218.
milk glucose, 579.
polycythemia, 587.
polycythemia, 587.
Lead, hair, 899.
poisoning, Vitamin D, 433.
Leishmaniasis, transmission, 254.
Leptospirosis, 17.
Leukocytes, bacteria, 378.
streptococci, 812.
Light adaptation, 616.
discrimination, 535. dwartism, 22b.
pregnancy, 193.

Hypophysectomy, carbohydrate utilization, 6.
lactation, 388.

Hypophysis, testes, 455.
thyroidectomy, 801.

Male sex, 4, 853.
castration, 538.

Maternal behavior, 66.
Ovarian follicular, 759.
Ovulation, pituitary, 552.
Parathyroid extract, nephrectomy, 777.
Pituitary, ant., 80.
ant. histologic structure, 80.
ant. histologic structure, 803.
ant., life span, 876.
ant., oestrin, 832.
ant., reproductive tract, 585.
extract, injection, 122.
gastrula, 608.
gonad stimulation, 902.
ovulation, 552.
Progesterone, Fallopian tube, 783.
tuberculosis, 656.
Sex abnormalities, 59.
dewlap, 116.
Testes, hypophyses, 455.
Testosterone propionate, endometrial
cycle, 779.
uterus, 235.
Theelin, adenofibroma, 21.
Thymoid, estrin, 843.
hypertension, 158.
pituitary extract, 797.
radioactive iodine, 510.
thyrotropin, 453.
urine, diabetes, 439.
Vitarii E 673. discrimination, 535. Liver, acacia, 46. erythrocytes, 787 Lung, magnesium, 2 Lysins, anemia, 540. Magnesium, lung, 233.
Moningitis, serum, 752.
Metabolism, body size, age, 793.
heart, 323.
Methylene blue, photodynamic action, 29.
Milk secretion, lactic acid, glucose, 579.
nitrogen, 632. Morphine, motility, 332.

Muscle fibers, chemicals, 719.

Vitamin E, 625, 665.

Myocardium, creatinine, 35.

Myxedema, cretinism, blood serum, 94. Neoplastic cells, x-rays, 490. colchicine, 555.

Nerve activity, demarcation potential, 918. afferent, oxygen deficiency, 427. anoxia, 315. digitalis, 314. discharge, stimulation, 921. giant fibers, 661. insulin. 897. insulin, 897. neural plate formation, 430. nicotine block, 886. radioactive iodine, 51 thyrotropin, 453. urine, diabetes, 439. Vitamin E, 623. Thyroxin, 201. metabolism, 847. pH, 171. Hyperglycemia, diabetes, 51. Hypertension, arterial, 10. epinephrine, 199. ergotamine tartrate, 497. thyroidectomy, 158. nicotine block, 886.
polarizing currents, 904.
potential reversal, NH4, 663.
rhythm, light, 216.
stomach, 139.
tongue, 308.
virus, 270.
Neurosyphilis, syphilitic reagin, 487.
Nicotinic acid, growth, 311.
nucleic acid, "filtrate factor," 195.
porphyrinuria, 178, 289.
S. aureus, 504.
toxicity, 241.
vitamin potency, 251.
Nitrogen, milk secretion, 632.
Nucleic acid, "filtrate factor," 195. thyroidectomy, 158. vasomotor properties, blood, 493. Immunology, pneumococci, 924, polysaccharides, 107, 110, 113, pure precipitin, 101.

Indol, hemolytic properties, 237.
Infection, pannus-forming, 42.
Insulin, brain potential, 897.
complement, 874.
convulsions, 300.
cysteine, 305.
diabetes, 394. Oil, cod liver, tuberculosis, 543.
Optic cortex, 532.
Oxidation potentials, bacteria, 445.
Oxygen deficiency, afferent nerves, 427.
deficiency, reflex dilatation, 426.
tension, liver extract, reticulocytes, 866. Pain, biliary tract, 44.
pH, 425.
Pancreas extract, ketosis, 410.
Paralysis, potassium, 922.
Pathology, myotonia congenita, 460.
micotinic acid, cytopenia, 860.
Pediculosis, diet, 383.
Pellagra, porphyrin, 748.
Pentoses, color test, 171.
Permeability, radioactive ions, 856.
Pertussis vaccine, immunization, 693.
infection, 407.
pH, pain, 425.
surface films, 526.
thyroxine, 171.
Phenylalanine, homogentisic acid, 742.
Phloridzin, succinic acid, glucose, 417.
Phosphatase activity, serum, 470.
Phosphatase activity, serum, 470.
Phosphorus, bone growth, 449.
Ca., Vitamin D, lead poisoning, 435.
heart muscle, 341.
Photodynamic action, dyes, gonococcus, 697.
methylene blue, 29.
Pitressin, asthma, 636.
Plague, sylvatic, 333.
Pneumococcus, serum, 343.
skin lesions, 187.
Pneumonia, alcoholic intoxication, 265.
meningitis, 835.
serum, ketene, 909.
Poliomyelitis, zinc sulphate, 603.
Polycythemia, lactic acid, 587.
Porphyrins, 557.
O. diyhtheriae, 423.
nicotinic acid, 289.
pellagra, 748.
Potassium, paralysis, 922.
Pregnandiol, urine, pregnancy, 503.
Procaine convulsions, 279.
Prontosil, blood cells, 19.
soluble, streptococci, 810.
Prontylin, tuberculosis, 574.
Pyruvic acid, blood, 296.

Radiation, Pseudomonas fluorescens, 176.

Radiation, Pseudomonas fluorescens, 176.
Radioactive iodine, thyroid, 510.
ions, penetration, 856.
Reflex dilatation, oxygen deficiency, 426.
Relapsing fever, spirochetes, 97.
Renal excretion, creatinine, 245.
metabolism, panereatectomy, 499.
response, epinephrine, 299.
Respiration, endogenous, 169.
quotient, diabetes, 137.
Reticulocyte, anemia, liver, 222.
liver extract, oxygen tension, 866.
Rhythm, light, 216.

Sarcoma, pregnancy, 338.
transmission, 485.
Sclerosis, athero-, choline, 231.
Sensitizing properties, polysaccharides, 668.
Serum, alcohol, 859.
anaphylactic shock, 184.
anti-, organ proteins, 447.
lipoids, 318.
S. hemolyticus, sulfonamide, 275.
Shock, ascitic fluid, 462, 651.
disease, 816.
insulin, 653.
insulin, blood flow, 894.
Vitamin C, 641, 642.
Skin distensibility, 882.
lesions, pneumococci, 187.
temperature, 150.
temperature, 150.
temperature, posture, 879.
Sodium benzoate, hippuric acid, 77.
Spermatozoe, mammalian, 63.
Spirochaeta recurrentis, 23.
Spirochaeta, gastric glands, 536.

relapsing fever, 97.

Splenectomy, antihormone, 773.
Staphylococcal enterotoxin, 82.
Staphylococcal enterotoxin, 82.
Staphylococcal enterotoxin, 82.
Staphylococcal enterus, nicotinic acid, 504.
Stomach, vagal innervation, 139.
Streptococci, endocarditis, 805.
hemolytic, 158.
hemolytic, air, 570.
hemolytic, liver extract, 837.
leukocytes, 812.

Sulfanilamide, 366.
Brucella, 732.
cyanosis, 479.
distemper, 263, 385.
hemolytic streptococci, 328.
liver tissue, 78.
meningococcus, 37.
trichiniasis, 461.

Sulfonamide, 8. hemolyticus, 275.
malaria, 768.
Sulfonamilide, streptococcal infection, 375.

Temperature, skin, 150.
Tetanus, pathogenesis, 283.
Thrombin, pro-, time, 11.
Toxicity, MnCl<sub>2</sub> · 4H<sub>2</sub>O, 740.
Toxins, interfacial adsorption, 568.
snake, 763.
Trypanosoma cruzi, infection, 191.
hyperlipemia, 103.
Tuberculosis, cod liver oil, 543.
prontylin, 574.
resistance, age, 575.
Tumor, adrenals, 441.
theelin, 21.
Typhoid infection, phage, 659.
vaccine, blood density, 73.
Typhus fever, 682.
infection, antibodies, 685.
rickettsiae, 26, 285.

Uric acid, blood, 638. Urine, antidiuretic substance, 644. Uterine activity, Ca., 550.

Vasomotor properties, hypertension, 493.
Venom, Crotalus, 892.
toxic components, 84.
Virus III, infection, 872.
fibroma, myxomatosis, 86.
high pressures, 248.
nerves, 270.
non-intranuclear inclusions, 92.
poliomyelitic, 147.
protein, tobacco mosaic, 260.
rabies, immunization, 40.
Vitamin, antihemorrhagic, bacteria, 336.
A, cod liver oil, 870.
A, pupil dilation, 613.
B1 metabolism, 404, 823.
B1, phenol, 723.
B6, 64.
C, blood plasma, 679.
C, cerebrospinal fluid, 164.
C, pyridium, 267.
C, shock, 641, 642.
C, wounds, 518.
D, lead poisoning, 433.
D, lead poisoning, 433.
D, lead poisoning, Ca. P., 435.
D, storage, 827.
D, toxic action, 791.
E, muscle, 625, 665.
K, D, 785.
nicotinic acid, 251.

Water, gradient, 468. Wounds, Vitamin C, 518.

X-rays, neoplastic cells, 490.

